

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:040**

**Permittee Name:** Star Manufacturing, Inc.  
**Mailing Address:** 1200 Russell Cave Road, Lexington, KY 40505

**Source Name:** Star Manufacturing, Inc.  
**Mailing Address:** 1200 Russell Cave Road  
Lexington, KY 40505

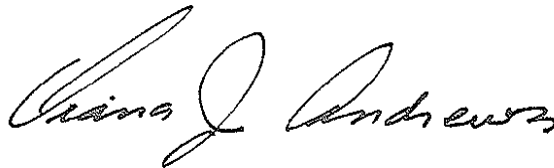
**Source Location:** 1200 Russell Cave Road

**Permit ID:** S-06-226  
**Agency Interest #:** 64981  
**Activity ID:** APE20060001  
**Review Type:** Minor Source, Construction  
**Source ID:** 21-067-00185

**Regional Office:** Frankfort Regional Office  
643 Teton Trail, Suite B  
Frankfort, KY 40601  
(502) 564-3358

**County:** Fayette

**Application**  
**Complete Date:** October 4, 2006  
**Issuance Date:** November 3, 2006  
**Revision Date:**  
**Expiration Date:** November 3, 2016



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**John S. Lyons, Director  
Division for Air Quality**

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- 01 (01)      Alkaline Cleaning Tank** – Tank Size: 371 gallons
- 02 (01)      Conditioner Tank** – Tank Size: 818 gallons
- 03 (01)      Zinc Phosphate Tank** – Tank Size: 268 gallons
- 04 (01)      Sealer Tank** – Tank Size: 268 gallons

**Description:** The above listed tanks are part of the pretreatment system for metal automotive parts. Tanks will be equipped with access lids that extend beyond housing on pump side. Hinged tank lids will be equipped with extended handles to minimize operator exposure to hot chemical vapors. The pretreatment ventilation exhaust system will consist of two (2) 2,150 cubic feet per minute exhaust fans, each equipped with a 1 horsepower motor to remove excess vapors at entrance and exit of the system. Expected Construction Date: December, 2006.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

**1.    Operating Limitations:**

The maximum annual make-up rate shall not exceed the following values:

- 01 Alkaline Cleaning Tank: 2,628 gallons
- 02 Conditioner Tank: 176 gallons
- 03 Zinc Phosphate Tank: 4,380 gallons, (consisting of buffer, sodium nitrite and phosphoric acid/nickel nitrate (or equivalent))
- 04 Sealer Tank: 438 gallons

Compliance Demonstration Method: Refer to Monitoring and Record Keeping Requirements.

**2.    Emission Limitations:**

- A. 401 KAR 59:010, § 3(1), Visible emissions from each pretreatment area stack shall be less than 20 percent opacity.
- B. 401 KAR 59:010, § 3(2), Particulate matter emissions from each pretreatment area stack shall not exceed 2.34 pounds per hour.

Compliance Demonstration Method:

Emission Limit A – Refer to Monitoring and Record Keeping Requirements.

Emission Limit B – Compliance with the mass emission standard is assumed when the operating limitations specified above are met.

**3.    Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Monitoring Requirements:**

- A. The monthly make-up rates for the tanks shall be monitored.
- B. A qualitative visual observation of the opacity of emissions shall be performed from the pretreatment stacks weekly and a log of the observations maintained. If visible emissions from the stack(s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of process equipment for all necessary repairs.
- C. Refer to Section C, Part G. Construction Requirements.

### **5. Recordkeeping Requirements:**

- A. Records of the monthly and annual make-up rates for the tanks shall be maintained.
- B. Records of weekly qualitative visual observations shall be maintained.
- C. Records of Method 9 readings taken as a result of seeing visible emissions shall be maintained.
- D. Refer to Section C, Part G. Construction Requirements.

### **6. Reporting Requirements:**

Reporting required by Section C, Part C.3 is specified here to consist of a submittal of monthly records of make-up rates, a summary of qualitative visual observations, and any Method 9 readings performed for the period.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****05 (02) Electrocoating system for metal automotive parts**

**Description:** The electrocoat tank will have a 2,185 gallon capacity. The ventilation exhaust system will consist of one (1) 2,150 cubic feet per minute exhaust fan equipped with a 1 horsepower motor to remove excess vapor. The electrocoat system is assumed to achieve a 90 percent transfer efficiency of coating to the metal part surface. Expected Construction Date: December, 2006.

**Applicable Regulations:**

401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

**1. Operating Limitations:**

The maximum annual make-up rate shall not exceed the following values:

Electrocoat Bath: 6,424 gallons

Electrocoat Resin: 14,454 gallons

Electrocoat Paste: 1,606 gallons

**Compliance Demonstration Method:** Refer to Monitoring and Record Keeping Requirements.

**2. Emission Limitations:**

A. 401 KAR 59:010, § 3(1), Visible emissions from the electrocoat stack shall be less than 20 percent opacity.

B. 401 KAR 59:010, § 3(2), Particulate matter emissions the electrocoat stack shall not exceed 2.34 pounds per hour.

**Compliance Demonstration Method:**

Emission Limit A – Refer to Monitoring and Record Keeping Requirements.

Emission Limit B – Compliance with the mass emission standard is assumed when the operating limitations specified above are met.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

**4. Monitoring Requirements:**

A. The monthly make-up rates for the electrocoat tank shall be monitored.

B. A qualitative visual observation of the opacity of emissions shall be performed from the electrocoat stack weekly and a log of the observations maintained. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of process equipment for all necessary repairs.

C. Refer to Section C, Part G. Construction Requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Recordkeeping Requirements:**

- A. Records of the monthly and annual make-up rates of the electrocoat tank shall be maintained.
- B. Records of weekly qualitative visual observations shall be maintained.
- C. Records of Method 9 readings taken as a result of seeing visible emissions shall be maintained.
- D. Refer to Section C, Part G. Construction Requirements.

**6. Reporting Requirements:**

Reporting required by Section C, Part C.3 is specified here to consist of a submittal of monthly records of make-up rates, a summary of qualitative visual observations, and any Method 9 readings performed for the period.

## **SECTION C - GENERAL CONDITIONS**

### **A. Administrative Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11].
4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5].
5. This permit does not convey property rights or exclusive privileges [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].

**SECTION C - GENERAL CONDITIONS (CONTINUED)****B. Recordkeeping Requirements**

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f)].
2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

**C. Reporting Requirements**

1.
  - a. In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
    - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
    - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
  - b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1. a. above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
3. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.



## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### **D. Inspections**

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
  - b. To access and copy any records required by the permit.
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
  - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

### **E. Emergencies/Enforcement Provisions**

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

**SECTION C - GENERAL CONDITIONS (CONTINUED)****F. Compliance**

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:  
Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail, Suite B Frankfort, KY 40601-1758	Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601-1403
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3. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
  - (a) Applicable requirements that are included and specifically identified in this permit; or
  - (b) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

**SECTION C - GENERAL CONDITIONS (CONTINUED)****G. Construction Requirements:**

1. Pursuant to 401 KAR 52:040, Section 12(3), unless construction is commenced on or before 18 months after the date of issuance of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or is not completed within a reasonable timeframe, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon a written request, the Cabinet may extend these time periods if the source shows good cause.
2. Pursuant to 401 KAR 52:040, Section 12(4)(a) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to the Regional Office listed on the front of this permit, with a copy to the Division's Frankfort Central Office, the following:
  - a. Date when construction commenced, (See General Condition G.1).
  - b. Start-up date of each of the affected facilities listed on this permit.
  - c. Date when maximum production rate was achieved, (See General Condition G.3.b).
3.
  - a. Pursuant to 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow time for the initial start-up, operation and compliance demonstration of the affected facilities listed herein. However, within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division. **It is specified here that this compliance demonstration shall consist of presentation of a monitoring and record keeping log incorporating the requirements specified in SECTION B for Emission Units 01, 02, 03, 04 and 05 to an authorized representative of the Cabinet if requested.**
  - b. Pursuant to 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.
4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of 401 KAR 52:040, Section 12(4)(b). Until compliance is demonstrated, the source may only operate for the purpose of demonstrating compliance.

**SECTION D - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Natural Gas Boiler (1.65 mmBTU/hr)	401 KAR 59:015
2. Natural Gas Cure Oven (1.0 mmBTU/hr)	N/A
3. Welding	401 KAR 59:010